

ABSTRACT:

The invention relates to any receiver for MPSK ($M=2^n$) modulation, in which an error correction device is used for correcting Tretter type frequency errors and, upstream of this device, a phase estimation device based on decisions made on the received symbols.

When the frequency error is such that, based on a certain symbol, an error is made in the decision, this error is translated by a phase jump of $\pm \frac{\pi}{2^{n-1}}$ in the sequence of phase estimations obtained. The frequency estimation obtained is then inaccurate.

A receiver according to the invention comprises means for calculating a phase sequence, called initial sequence, based on decisions made on symbols, and means for detecting and correcting phase jumps in this initial sequence, so as to supply a phase sequence, called final sequence, to said frequency error estimation means.

Applications: Interactive data transmission system – network head-ends.

References: Fig. 5